

IBM System/370 Model 155

provides more computing performance than System/360 Models 40 and 50 without a parallel increase in price. Its upward compatibility from Models 40 and 50 protects programming investments and makes for easy transition without reprogramming.

Model 155 has fast internal speeds, new channel capability, large main memory and integrated emulation. It has:

- internal speeds about 3½ to 4 times Model 50
- a 115-nanosecond cycle time
- instruction fetching overlapped with instruction execution
- high-speed buffer — 8,192 bytes, with 230-nanosecond access time
- 256K to 2,048K bytes of high-speed main storage available
- faster channels — aggregate data rate of 5.4 megabytes — individual channel rates of 1.5 megabytes

- error checking and correction automatically corrects all single-bit main storage errors and detects double and most multiple-bit errors
- CPU retry
- channel retry
- Byte multiplexer channel is functionally equivalent to the System/360, Models 40 & 50. One channel is standard and a second may be added.
- Block multiplexer channels allow attachment of high-speed I/O devices. Two channels standard; three additional may be added. Block multiplexer channels are supersets of selector channels. They increase system throughput when used in conjunction with new I/O devices by permitting more data to enter and leave the system in a given period of time.
- New instructions eliminate need for multiple move instructions or move subroutines, and facilitate record blocking and deblocking, field padding and storage clearing.
- Extended precision floating point — optional and field-installable — provides precision up to 28 hexadecimal digits, equal to about 34 decimal digits.
- Interval timer (3.3 milliseconds) for short-duration tasks.
- Time-of-day clock.
- Byte boundary alignment permitted for operands of non-privileged instructions.
- New console design permits use of either 15- or 85-character-per-second printer keyboards.
- Relocatable emulators that operate under OS and DOS permit users of 1401/1410/1440/1460/7010 programs who are emulating on System/360 to move to Model 155.
- OS (MFT/MVT) and DOS are the major operating systems.

